



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,096	09/15/2006	Stephen Privett	P07342USD	6624
22885 7590 02/03/2010 MCKEE, VOORHEES & SEASE, P.L.C. 801 GRAND AVENUE SUITE 3200 DES MOINES, IA 50309-2721				
EXAMINER				
PAUL, DISLER				
ART UNIT		PAPER NUMBER		
2614				
NOTIFICATION DATE		DELIVERY MODE		
02/03/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

Office Action Summary

Application No.

10/553,096

Applicant(s)

PRIVETT, STEPHEN

Examiner

DISLER PAUL

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

The Applicant's amended claim (1) as filed on 1/6/2010 has been further analyzed and rejected over new prior art.

As amended, the new prior art of record as in Curtis (US 6,389,139 B1) disclose of a distribute audio system for use in different rooms of a premises including a plurality of speakers adapted for location in different rooms of a premises, a power supply and, intermediate said power supply and each of said speakers there is provided an amplifier arrangement (fig.1 (16, 20,42,44); fig.7 (16a; 20, 42, 44); col.1 line 15-20; col.3 line 26-30; col.4 line 41-47; col.6 line 50-59/ speakers being provided in different rooms of a premises and having a power amplifier (20) intermediate the power supply and the speakers), comprising an audio input, an audio output (fig.1 (20); fig.5A (20); col.6 line 42-48); said power supply being arranged remotely of said amplifier arrangement and wherein said system is configured so that the said power supply is connected to a plurality of said amplifier arrangements via respective cable, wherein said amplifier arrangement are respectively located in different rooms of a premises (fig.1 (16, 20); fig.7 (16, 16a, 20); col.6 line 42-59; col.16 line 64-67; col.17 line 1-9; col. 11 line 22-30/a single remote power supply (16) may be used to provide power to plurality of amplifier arrangements (20) in the plurality of rooms).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-8 are rejected under 35 U.S.C. 103(a) as being Unpatentable over Curtis et al. (US 6,389,139 B1) and Kemmerer et al. (US 2003/0123678 A1).

Re claim 1, Curtis disclose of a distribute audio system for use in different rooms of a premises including a plurality of speakers adapted for location in different rooms of a premises, a power supply and, intermediate said power supply and each of said speakers there is

provided an amplifier arrangement (fig.1 (16, 20,42,44); fig.7 (16a; 20, 42, 44); col.1 line 15-20; col.3 line 26-30; col.4 line 41-47; col.6 line 50-59/ speakers being provided in different rooms of a premises and having a power amplifier (20) intermediate the power supply and the speakers), comprising an audio input, an audio output (fig.1 (20); fig.5A (20); col.6 line 42-48); said power supply being arranged remotely of said amplifier arrangement and wherein said system is configured so that the said power supply is connected to a plurality of said amplifier arrangements via respective cable, wherein said amplifier arrangement are respectively located in different rooms of a premises (fig.1 (16, 20); fig.7 (16, 16a, 20); col.6 line 42-59; col.16 line 64-67; col.17 line 1-9; col. 11 line 22-30/a single remote power supply (16) may be used to provide power to plurality of amplifier arrangements (20) in the plurality of rooms).

However, Curtis fail to disclose of the specific wherein amplifier arrangement comprising a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from the power supply and output a substantially constant voltage to the switching amplifier.

But, Kemmerer et al. disclose of a system wherein an amplifier arrangement comprising: a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier (fig.2 (Battery; 42, 44, 2, 4); par [0035-0036; 0055]) so as to provide DC voltage to the amplifier for audio modification. thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art

with implementing the amplifier arrangement comprising: a switching regulator and a switching amplifier; switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier so as to provide DC voltage to the amplifier for audio modification.

The combined teaching of **Curtis and Kemmerer et al.** as a whole, further disclose of amplifier arrangements being located in different rooms and located within a certain range remotely from the said power supply via wiring cable (fig.1 (16, 20); col.8 line 40-50; col.11 line 22-30/the power supply with conditioner (16, 14) may be remotely connected to the amplifier arrangement via cable).

Thus, similarly, it would have been obvious for one of the ordinary skill in the art to have tried in having such location range to being within a range of up to 50 meters so as to transmit the audio signal for modification in the preferred distant area location as desired.

Re claim 2, the audio system according to claim 1, wherein the switching amplifier is a digital amplifier (fig.1 (2); par [0031]).

Re claim 4, audio system according claim 2, wherein the circuitry of either the switching regulator and/or the switching amplifier is constructed of discrete components (fig.2 (2a, 2b, 2c); par [0059]).

Re claim 5, the audio system according to claim 4, the combined teaching of **Curtis and Kemmerer et al.** as a whole, would have taught of such specific wherein the switching amplifier processes at least two channels of audio input (fig.1 (20)/ switching amplifier within the amplifier arrangement (20) having multi-channel audio input signal).

Re claim 6, the audio system according to claim 5, but, the combined teaching of **Curtis and Kemmerer et al.** as a whole, fail to disclose of further including an auxiliary control device, e.g. to control the audio output volume.

But, Kemmerer disclose of a system wherein such further including an auxiliary control device, e.g. to control the audio output volume (Kemmerer, par [0009-0010]/remote control receiver may be used) so as to control the audio output signal from a distant remote location. Thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art with implementing the auxiliary control device, e.g. to control the audio output volume so as to control the audio output signal from a distant remote location.

Re claim 8, the audio system according to claim 1, wherein the power supply is connectable to the remote amplifier arrangement via a wiring cable of a certain length (fig.1 (16, 20); col.8 line 40-50; col.11

line 22-30/the power supply with conditioner (16, 14) may be remotely connected to the amplifier arrangement via cable).

Similarly, it would have been obvious for one of the ordinary skill in the art to have tried in having such length of the cable as being specifically between a preselected maximum e.g. 50 m, and a preselected minimum, e.g. 1 m. so as to transmit the audio signal for modification in the preferred distant area location as desired.

Re claim 7, the audio system according to claim 6, wherein the switching regulator and the switching amplifier are being housed in a certain housing (fig.2 (2,4)). However, the combined teaching of Curtis et al. and Kemmerer et al as a whole, failed to teach of the specific wherein the switching regulator and the switching amplifier are being housed in a single housing. But, it would have been obvious for one of the ordinary skills in the art to have tried in modifying the such switching regulator and switching amplifier as being housed in a certain housing with further implementing such adjustment wherein the switching regulator and the switching amplifier are being housed in a single housing with no unexpected result based on the obvious variation of engineering design.

5. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtis et al. (US 6,389,139 B1) and Kemmerer et al. (US 2003/0123678 A1) and further in view of Pearce et al. (US 5,973,368).

Re claim 3, the audio system according to claim 2 with the switching amplifier, However, the combined teaching of Curtis et al. and Kemmerer et al. as whole, fail to disclose of the specific wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage. But, Pearce et al. disclose of an audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage (fig.1F-G; col.6 line 35-65; col.13 line 35-47) for purpose of driving the speaker with the low voltage audio signal. Thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art as combined with implementing the audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage for purpose of driving the speaker with the low voltage audio signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./
Examiner, Art Unit 2614

/Xu Mei/
Primary Examiner, Art Unit 2614